aequationes mathematicae

Volume 20, 1980

University of Waterloo, Ontario, Canada
Birkhäuser Verlag, Basel • Boston • Stuttgart

QA 431
A 36

aequationes mathematicae

Subscription per volume:
sFr. 96.–/US$ 64.00
Single copy:
sFr. 37.–
1–2 volumes of 3 numbers each year

aequationes mathematicae is published by the University of Waterloo and Birkhäuser Verlag. Price per volume (three issues) is 96 Swiss francs/US$ 64.00 including postage and costs of mailing, payable at the office of the publisher, Birkhäuser Verlag in Basel, Switzerland, or through your bookseller.

The journal will publish papers in pure and applied mathematics in general but, in particular, papers on functional equations, combinatorial and numerical analysis. The languages in which papers will generally be accepted are the international congress languages: English, French and German.

Types of manuscripts that will be considered for publication include original research papers, reports of meetings and activities, problems and their solutions, expository papers and, as sho communications, self-contained abstracts of papers which have been accepted for publication either by this or some other journal with a referee system.

Manuscripts of papers should be submitted to the Editorial Office or to a member of the edito board. Authors of papers should send the original and, two additional copies. Since it is the policy of the journal to publish in advance short communications of all results it accepts publication, authors should include with the original submissions a self-contained abstract of their paper of length 25–100 lines, which contains a precise statement of the results in the pap

EDITORS

Professor A. M. Ostrowski
University of Basel
Basel, Switzerland
Honorary Editor in Chief

Professor J. Aczél
University of Waterloo
Waterloo, Ontario, Canada
Editor in Chief

Professor L. J. Dickey
University of Waterloo
Waterloo, Ontario, Canada
Managing Editor

Prof. G. Aumann
Technical University
Munich, Germany

Prof. J. A. Baker
Univ. of Waterloo
Waterloo, Ontario, Canada

Prof. W. Benz
Univ. of Hamburg
Hamburg, Germany

Prof. G. Choquet
Univ. of Paris VI
Paris, France

Prof. L. Collatz
Univ. of Hamburg
Hamburg, Germany

Prof. H. S. M. Coxeter
Univ. of Toronto
Toronto, Ontario, Canada

Prof. P. Erdös
Math. Inst. Hung. Acad. Sci.
Budapest, Hungary

Prof. I. Fenyö
Technical University
Budapest, Hungary

Prof. J. A. George
Univ. of Waterloo
Waterloo, Ontario, Canada

Prof. B. Grünbaum
Univ. of Washington
Seattle, Washington, USA

Prof. O. Haupt
Univ. of Erlangen-Nürnberg
Erlangen, Germany

Prof. D. M. Jackson
Univ. of Waterloo
Waterloo, Ontario, Canada

Prof. M. Kuczma
Silesian University
Katowice, Poland

Prof. J. W. Lawrence
Univ. of Waterloo
Waterloo, Ontario, Canada

Prof. J. D. Lawson
Univ. of Waterloo
Waterloo, Ontario, Canada

Prof. M. A. McKiernan
Univ. of Waterloo
Waterloo, Ontario, Canada

Prof. R. C. Mullin
Univ. of Waterloo
Waterloo, Ontario, Canada

Prof. C. St. J. A. Nash-Williams
Univ. of Reading
Reading, England

Prof. C. T. Ng
Univ. of Waterloo
Waterloo, Ontario, Canada

Prof. G. Pickert
Justus-Liebig-Universität
Giessen, Germany

Prof. F. Radó
Babes-Bolyai University
Cluj, Romania

Prof. L. B. Richmond
Univ. of Waterloo
Waterloo, Ontario, Canada

Prof. H. Rund
Univ. of Arizona
Tucson, Arizona, USA

Prof. B. M. Schein
Tulane University
New Orleans, Louisiana, U

Prof. M. H. Schultz
Yale University
New Haven, Conn., USA

Prof. B. Schweizer
Univ. of Massachusetts
Amherst, Mass., USA

Prof. A. Sklar
Illinois Inst. of Technology
Chicago, Illinois, USA

Prof. R. G. Stanton
Univ. of Manitoba
Winnipeg, Manitoba, Can

Prof. J. Todd
Calif. Inst. of Technology
Pasadena, California, USA

Prof. W. T. Tutte
Univ. of Waterloo
Waterloo, Ontario, Canad

PUBLISHER: Birkhäuser Verlag, P. O. Box 34, CH-4010 Basel/Switzerland
EDITORIAL OFFICE: University of Waterloo, Faculty of Mathematics, Waterloo, Ontario, Canada N2L 3G1

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically those of translation, reprinting, re-use of illustrations, broadcasting, reproductions by photocopying machine or similar means, and storage in data banks.
© Birkhäuser Verlag, CH-4010 Basel/Switzerland, 1980
ISSN 0001-9054

Contents Vol. 20 1980

Survey Paper

PETERSON, B., and TAFT, E.J.: The Hopf algebra of linearly recursive sequences, 1.

TAFT, E.J., v. PETERSON, B., 1.

Research Papers

ANDERSEN, L.D., and THOMASSEN, C.: The cover-index of infinite graphs, 244.

BEDINGFIELD, N.K.: An initial value problem for a functional equation, 90.

CHEN, YI: On characterizing nearfields, 119.

CHINDA, K.P.: Some theorems on hemigroups, 198.

GALLIAN, J.A., and MARTTILA, CH.A.: Reorienting regular n-gons, 97.

HARTZMAN, C.S.: Separatrices and singular points, 59.

HOPPE, F.M.: On a Schröder equation arising in branching processes, 33.

INFANTE, R.P.: Strong normality and normality for difference fields, 159.

IVIĆ, A., and SCHWARZ, W.: Remarks on some number-theoretical functional equations, 80.

KANNAPPAN, PL.: On some generalized functional equations in information theory, 149.

MARTTILA, CH.A., v. GALLIAN, J.A., 97.

MIEL, G.J.: Cones and error bounds for linear iterations, 170.

MOAK, D.S.: The q-gamma function for $q>1$, 278.

NIKODEM, K.: On convex stochastic processes, 184.

OSTROWSKI, A.M.: On the remainder term of the de Moivre-Laplace formula, 263.

OXLEY, J.G.: On a covering problem of Mullin and Stanton for binary matroids, 104.

REICH, L., and SCHWAIGER, J.: Linearisierung formal-biholomorpher Abbildungen und Iterationsprobleme, 224.

ROSS, D.K.: Inequalities and identities for $y_n^2 - y_{n-1}\, y_{n+1}$, 23.

SAAB, P.: The Choquet integral representation in the affine vector-valued case, 252.

SCHECHTER, M.: Wave operators for pairs of spaces and the Klein-Gordon equation, 38.

SCHROTH, P.: On $(1, b_p)$-replicative functions with isolated discontinuities, 73.

SCHWARZ, W., v. IVIĆ, A., 80.

SCHWAIGER, J., v. REICH, L., 224.

SERTEL, M.R., and VAN DER BELLEN, A.: Computations in choice groupoids, 129.

SUBRAHMANYAM, P.V.: An operator equation in a Tychonoff space, 166.

ŚWIATAK, H.: On an equation of information theory, 18.

TARDIFF, R.M.: On a functional inequality arising in the construction of the product of several metric spaces, 51.

TEO, K.L.: Existence and uniqueness of solutions of system governed by second order quasilinear integro-partial differential equation of parabolic type, 133.

THOMASSEN, C., v. ANDERSEN, L.D., 244.

VAN DER BELLEN, A., v. Sertel, M.R., 129.

Reports of Meetings

Siebzehnte internationale Tagung über Funktionalgleichungen in Oberwolfach vom 17.6. bis 23.6.1979, 286.

Problems and Solutions, 316.

Short Communications

CHINDA, K.P., and DAY, J.M.: The structure of hemigroups, 116.

DAVISON, T.M.K., and REDLIN, L.: Hosszú's functional equation over rings generated by their units, 318.

DAY, J.M., v. CHINDA, K.P., 116.

GRAW, R., and KUCZMA, M.: Infinite discrete sets of limit points of iterative sequences of continuous functions, 117.

KARDOS, P.: Bellman's functional equation generalized. I., 113.

KUCZMA, M.: On a theorem of B. Barna, 115.

KUCZMA, M., v. GRAW, R., 117.

LAVERY, J.E.: Solution of a class of quasilinear Dirichlet and Neumann problems by the method of reduction, 318.

MOAK, D.S.: The q-gamma function for $x<0$, 114.

PELLING, M.J., and ROGERS, D.G.: Some (2, n) combinatorial Stein groupoids, 319.

REDLIN, L., v. DAVISON, T.M.K., 318.

ROGERS, D.G., v. PELLING, M.J., 319.

WEBB, G.F.: A representation formula for strongly continuous cosine families, 115.